

CLAIMS

1. A processing liquid coating apparatus for coating a surface of a substrate with a processing liquid, said apparatus comprising:

a substrate holder for holding and rotating the substrate; and

a processing liquid supply unit disposed apart from the substrate held by said substrate holder;

wherein said processing liquid supply unit has a plurality of supply ports for supplying the processing liquid to a plurality of portions including a central portion of the surface of the substrate, and the processing liquid is a resist liquid or a developer.

2. A processing liquid coating apparatus according to claim 1, wherein said processing liquid supply unit has a plurality of suction ports for sucking the processing liquid on the substrate.

3. A processing liquid coating apparatus according to claim 2, wherein said plurality of supply ports and said plurality of suction ports are arranged alternately and linearly.

4. A processing liquid coating apparatus according to claim 1, wherein said processing liquid supply unit is movable in a radial direction of the substrate.

5. A processing liquid coating apparatus according to any one of claims 1 to 4, further comprising a processing liquid suction unit for sucking the processing liquid from a peripheral portion of the substrate.

6. A processing liquid coating apparatus according to any one of claims 1 to 5, further comprising a gas supply unit for ejecting a gas toward the surface of the substrate, said gas supply unit being movable from the central portion to a peripheral portion of the substrate.

7. A processing liquid coating method for coating a surface of a substrate with a processing liquid, said method comprising:

rotating the substrate; and

supplying the processing liquid to a plurality of portions including a central portion of the surface of the substrate;

wherein the processing liquid is a resist liquid or a developer.

8. A processing liquid coating method according to claim 7, further comprising sucking the processing liquid from a plurality of portions of the surface of the substrate.

9. A processing liquid coating method according to claim 7, further comprising sucking the processing liquid from a plurality of portions including a peripheral portion of the surface of the substrate.

10. A processing liquid coating method according to any one of claims 7 to 9, further comprising:

ejecting a gas from a gas supply unit toward the surface of the substrate; and

moving said gas supply unit from the central portion to a peripheral portion of the substrate.